



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,855	02/20/2004	Werner Doetsch	038715.53046US	1653

23911 7590 02/14/2006

CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER

SAYALA, CHHAYA D

ART UNIT	PAPER NUMBER
----------	--------------

1761

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/781,855

Applicant(s)

DOETSCH ET AL.

Examiner

C. SAYALA

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/7/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 63270612 or RU 2073436.

Each of these patents teaches a composition containing alkaline earth peroxide and boron.

In '612, the ratios compare with the peroxide content and taken with the boron content of the specification compare well with the instant invention.

In '436, the amounts of copper peroxide and boron are given as being 40-99.9% by wt. and 0.2-60.0 % by wt. respectively.

2. Claims 1-3 and 8-11 are under 35 U.S.C. 102(b) as being anticipated by GB 1580248.

The patent teaches treating sugar beet seeds with calcium peroxide, 0.01 and 90.0% by weight, for improving the quality of the beet. The boron additive is added in an amount 0 to 10%, preferably 0 to 5% by wt. (see page 2, lines 10-25; page 1, lines 25-30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doetsch et al. (US Patent 6193776) or Farone et al. (US Patent 5395419) in view of GB 1580248 and further in view of GB 1575792.

Doetsch et al. teach a homogeneous calcium/magnesium peroxide with an active oxygen content of 10-18% by wt. Farone et al. also teach treating plant media with calcium or magnesium peroxide, which delivers oxygen. See abstract, col. 14, lines 30-43. Both patents do not teach the boron.

The GB '248 teaches a calcium peroxide amount of up to 50% and 0 to 5% of boric acid in a solution which are fed into a granulator and then dried. A granulator inherently would mix the ingredients to homogeneity. See PTO-form 892, which furnishes a reference that establishes this as a fact.

It would have been obvious to treat the peroxygenated of the prior references also by treating them with boric acid, which '792 states, adds stability to the peroxygenated compounds. See col. 1, lines 26-45 and col. 2, lines 45-52 at page 1.

Art Unit: 1761

Line 53 at page 1 states "In order to improve the stability of the peroxygenated compounds it has also been suggested that the peroxygenated compounds be mixed in the solid phase with metaboric acid". Such a teaching provides motivation to combine the compounds as shown by '248 and to incorporate such in the primary patents.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the peroxygenated compounds of the primary references with boric acid which adds stability to the peroxygenated compounds, as taught by '792 to form dry homogeneous granules by the method of GB '248. See page 2, lines 18-30. To incorporate the method of '248 in '776 or '419 in order to introduce boron compounds to their composition to add to the stability of the the peroxygenated composition, would have been obvious to one of ordinary skill in the art at the time was made.

Response to Arguments

Applicant's arguments filed 12/7/05 have been fully considered but they are not persuasive.

On page 3, applicant states that the abstract of JP63270612 does not contain any boron compound. This is incorrect. The Derwent abstract provided to applicant clearly indicates that a boron compound is included.

Next applicant states that the RU patent abstract "fails to teach a homogeneous, boron-doped alkaline earth peroxide, as is presently claimed". As stated earlier, based on the supplied dictionary meaning of "doped" from a chemical dictionary and the Webster

Art Unit: 1761

dictionary, the "boron-doped alkaline earth peroxide" is being interpreted as the alkaline material being treated or impregnated with boron as a dopant or the alkaline material being combined with a small amount of boron as a dopant. Applicant's reference to the method of making the composition at page 4 of the specification does not overcome this rejection because this claim does not recite any process steps; it is a composition claim. Applicant's statement that the reference is to a liquid mixture does not take away from the fact that the calcium peroxide and the boron are in the same amounts and, being in a liquid state provides for its homogeneity. The claim has no indication that it is in a solid state. As for applicant pointing out that the claim can be distinguished from a liquid mixture by the recitation of the process of making at page 4 of the specification, applicant cannot rely on the specification to impart to the claims limitations not recited therein. Such a reliance is ineffective to define over the prior art. In re Lundberg, 244 F2d 543, 113 USPQ 530 (CCPA 1957), In re Winkhaus, 188 USPQ 129 (CCPA 1975). The claim does not include any limitation as to its state: solid or liquid and even if it does homogeneity can exist in both states.

As for GB '248, page 2 indicates that the coating composition contains both the peroxide and boron in the amounts claimed and the contents are mixed. At page 4, applicant points to a dopant as "an impurity element that is incorporated into a semiconductor crystal in low concentrations in order to alter the properties of the semiconductor. The process of introducing dopants into a semiconductor is called doping. Further, boron is a common dopant". It is surmised from this that boron is a common dopant in the semiconductor art. But applicant's reference to semiconductors

Art Unit: 1761

and dopants is confusing. Neither the reference nor the claims relates to semiconductors. Furthermore, the last Office action provided dictionary meanings of "doped" from a chemical dictionary and the Webster dictionary, the "boron-doped alkaline earth peroxide" is being interpreted as the alkaline material being treated or impregnated with boron as a dopant or the alkaline material being combined with a small amount of boron as a dopant. Based on this, the amounts claimed herein and the claims, and the fact that the coating composition has additives that are mixed, the claim has been met.

The rejection of claims 1-3 based on JP 610331104, has been withdrawn, based on the translation supplied.

As for applicant's remarks criticizing the last rejection in the Office action, those remarks are vigorously disagreed with. Applicant states that GB '792 does not teach a homogeneous peroxide, much less a boron-doped peroxide, as required by the claims. If it had indeed taught this, this rejection would not be made under 35 USC 103. Then applicant states that GB '792 teaches away from the present invention by showing a solid coating comprising a boron compound and not a homogeneously doped throughout the peroxide. What the reference does teach is that a small amount of boron stabilizes the peroxide, while GB '248 teaches the amounts of not only the peroxide and boron. In other words, these two patents provide the amounts and the motivation to improve the homogeneous peroxide composition of Doetsch et al. ('776) by incorporating the amount of boron that would suffice to stabilize the peroxide composition, as shown by GB '248. Applicant has unduly limited his view of all that

Art Unit: 1761

each reference would have fairly suggested to a person having ordinary skill in this art. Under 35 USC 103, a reference must be considered not only for what it expressly teaches, but also for what it fairly suggests. *In re Burckel*, 592 F.2d 1175, 1179, 201 USPQ 67, 70 (CCPA 1979). Finally, applicant's last paragraph is very confusing. His remark that the boron-doped peroxide has boron in the crystal lattice of the peroxide, could not be found in the specification and perhaps refers to semiconductors, which is not the subject matter of these claims/invention.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1761

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. SAYALA whose telephone number is 571-272-1405.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



C. SAYALA
Primary Examiner
Group 1700.